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10/038,062	01/04/2002	Stephen A. Milks	8416-000008	5754

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EXAMINER

GRAY, MICHAEL KUHN

ART UNIT	PAPER NUMBER
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3746

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DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/038,062

Applicant(s)

MILKS, STEPHEN A.

Examiner

Michael K. GRAY

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 11 June 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-16,18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-3,5-8,10-16 and 19 is/are rejected.
- 7) ☐ Claim(s) 9 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## **SECOND DETAILED ACTION**

This Office Action is responsive to the Amendment filed June 11, 2003.

### ***Drawings***

The previous objection to the drawings has been withdrawn.

### ***Specification***

The previous objection to the specification regarding the claimed "tab" and "dimple" is withdrawn.

### ***Claim Objections***

Claim 1 is objected to in that it claims a desired result, e.g., creating a liquid impermeable seal, etc., without claiming the structure which allows such a result to occur.

Claim 10 is objected to in that it claims a desired result, i.e., claims the elongated support is capable of being pivotally disposed, etc., without claiming any structure which achieves the result.

Claims 3 and 12 are objected to for claiming a desired result without claiming the elements which allow the device to produce an air current of equal or greater value than that produced by an air circulation device powered by a 120-volt alternating current. Further, all fans or fan blades powered by a 120-volt alternating current do not produce the same air circulation or current. Is applicant claiming his direct current powered air circulation device produces greater air circulation than all alternating current driven air circulation devices? The metes and bounds of these claims are not clear.

In claims 3, 10 and 12, no weight has been given to the claims after the words "capable of".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung (5,839,205) in view of Shibuya et al. (5,270,596).

Hung demonstrates an air circulation device having a housing having a front face portion 61, a main base portion 1 and a rear face portion 11 (Figure 1). The base portion has a motor 3 and a fan blade 41. The motor and associated motor bearings are sealed within a rigid casing (Figure 2). The motor 3 is powered by a 12-volt direct current power source as is provided by the cigarette lighter socket of an automobile. In that the Hung device is used as a hair dryer, one of ordinary skill in the art would recognize it as being of plastic construction so as to have desirable light-weight and low-cost properties.

Shibuya et al. disclose a d.c. motor in which the internal space 18 of a d.c. motor 16 and bearing 10 are hermetically sealed in a rigid casing 13 which can be made of aluminum or synthetic resin. (bottom column 2).

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In Shibuya et al., the casing hermetically seals the air outside the motor from entering the casing so that corrosive gases and vapors are prevented from entering the motor housing. (col. 3, lines 40-50). The d.c. motor drives a shaft 19 which can be used to drive various types of equipment, e.g., a fan hub.

In that it is desirable to prevent corrosive influences from affecting a fan drive motor, it would have been obvious to one of ordinary skill in the art to utilize a sealed d.c. motor as disclosed by Shibuya et al. to increase motor life in the Hung device.

Claims 1, 7-8, 10-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raab et. al. (5,232,090) in view of Shibuya et al. (5,270,596).

Raab et al. demonstrate an air circulation device having a housing assembly which includes a front face portion (front grill) , a main base portion 11, 12, 13, and a back face portion (rear grill). The base portion includes a motor 15 and fan blade 14. The motor 15 is the type which inherently has a rigid casing in which the bearings are sealed. The bottom face 11 of the main base portion includes at least one elongated support member 19, 20.

The elongated support members 19, 20 are capable of being pivotally disposed in an extended position or a contracted position as a result of their being mounted by a pivot pin 21.

In that the support members are attached to the box frame at one location, i.e., at the location of pin 21, one of ordinary skill in the art would have considered it as obvious that the support members could be secured to the box frame by screws or nuts and bolts so that the support members could be angularly positioned at various angles with the box frame and tightened thereto at the desired angle .

Shibuya et al. disclose a d.c. motor in which the internal space 18 of a d.c. motor 16 and bearing 10 are hermetically sealed in a rigid casing 13 which can be made of aluminum or synthetic resin. (bottom column 2).

In Shibuya et al., the casing hermetically seals the air outside the motor from entering the casing so that corrosive gases and vapors are prevented from entering the motor housing. (col. 3, lines 40-50). The d.c. motor drives a shaft 19 which can be used to drive various types of equipment, e.g., a fan hub. The d.c. operating voltage of the device would be determined by power requirements of the driven device and the availability of given d.c. energy sources, e.g., a 12 volt plug of an automobile.

In that it is desirable to prevent corrosive influences from affecting a fan drive motor, it would have been obvious to one of ordinary skill in the art to utilize a sealed d.c. motor as disclosed by Shibuya et al. in the fan of Raab et al. to increase motor life and mobility of the fan.

One of ordinary skill in the art would have recognized that the box design of the Raab et al. fan housing could be made in any number of dimensions--from large to small. In that the d.c. motor of Shibuya et al. is a miniature d.c. motor, it would have been obvious for one of ordinary skill to use the motor in a fan having a three inch thickness.

***Response to Arguments of Applicant***

The applicant amended claim 1 to include language that the motor is sealed in a rigid casing so that the device can be subjected to liquids without corroding, etc.

Shibuya et al. teach a sealed motor and its associated bearings in a casing which protects the motor from outside corrosive influences. The motor is most applicable to fan motors.

Thus, applicant's arguments which concern or which are directed to the non-sealed motor arrangement of the previously applied art, do not hold water in light of the Shibuya et al. reference.

Applicant further argues that the Raab et al. reference does not allow the support member to have an intermediate position in that the support is spring-loaded. The examiner agrees that the spring prevents the supports of Raab et al. from having an intermediate position. However, one of ordinary skill in the art would recognize that the supports could be secured at the location of pin 21 by screw or nut and bolt securing means so that the supports could be affixed at any angular position with reference to the bottom of the box frame support.

### ***Suggestions***

It is suggested that the applicants include claim language which claims how the main base 30 and its side face 170 is connected to the rear face 40 and front face 20 by flanges 90 provided on the front and rear faces.

### ***Allowable Subject Matter***

Claims 9 and 18 would appear to contain allowable subject matter in that the claimed elongated support portion which is secured by a knob and a dimple would not appear to be demonstrated in the prior art. Accordingly, claims 9 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***References***

The additional reference of Carter (5,725,356) is cited as disclosing a plastic type fan and fan housing which could accommodate a drive motor as disclosed by Shibuya et al. Carter discloses supports 36, 42 which can be utilized in an extended or contracted position or at positions in between.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Gray whose telephone number is (703) 308-6196.

If the examiner does not answer the phone, a message will be provided as to when he will be in the Office. A message may be left on the examiner's voice mail.

The examiner's supervisor Timothy Thorpe can be reached at (703) 308-0102.

The examiner's fax number is (703) 746-4527.

Any inquiry of a general nature should be directed to the receptionist whose telephone number is (703) 308-0861.

<sup>mvj.</sup>  
**/Michael K. Gray**  
**Patent Examiner**  
Art Unit 3746

*Cheryl J. Tyler*  
**CHERYL J. TYLER**  
**PRIMARY EXAMINER**